

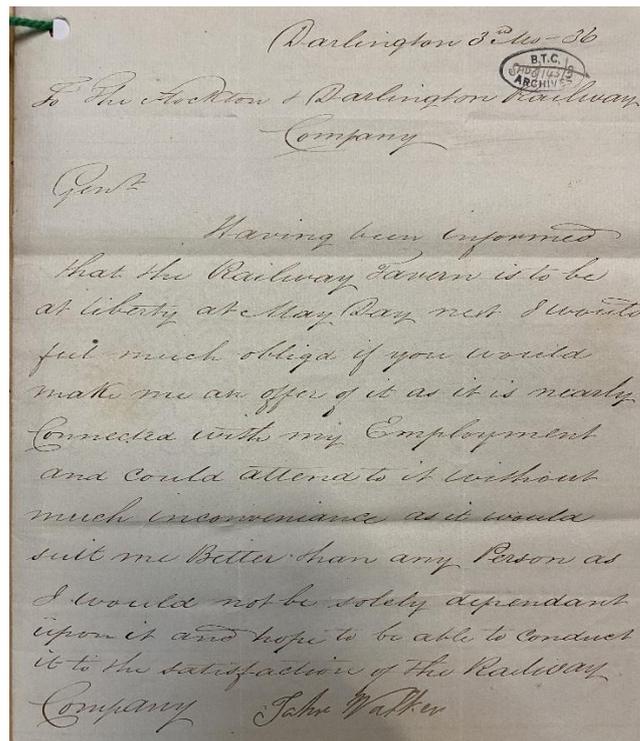
BE IT REMEMBERED

William Lister, Iron Founder and Engine Builder (1785 – 1850)

1. Introduction

The history of the Stockton and Darlington Railway (S&DR) is predominantly told through the lives of people such as Edward Pease, George Stephenson and Timothy Hackworth, but what about lives of other characters who have a story to tell about their time at the birth of the modern railway?

I came across William Lister through John Walker, a whitesmithⁱ, who on 3rd of March 1836, had written a letter to the Stockton and Darlington Railway Company (S&DRC) stating his interest in taking on the Railway Tavern in Darlington.¹



John Walker's letter to the S&DRC 3 March 1836: The National Archive (TNA): RAIL 667/1075

ⁱ A whitesmith is a skilled metalworker who works with light metals such as silver and tin, producing articles such as locks, keys, fire grates, tools, screws and machine parts; products that require neat and delicate finishes through filing, lathing, burnishing and polishing.

John's application was successful. The minutes of the S&DRC sub-committee meeting on Friday April 8th 1836 record: *'Mr Barnard reports that he has let the Tavern in Darlington to Jn Walker at the annual rent of thirty two pounds, Wm Lister agreeing to guarantee the payment thereof.'*²

I wondered who William Lister was. There was a William Lister in Pigot's 1834 directory, an iron and brass founder, based in Northgate, Darlington. So began my journey of uncovering the history of a remarkable life.

2. Early years: 1785 to 1806

William's time started out in New Elvet,³ Durham. He was baptised on 22nd May 1785 at St Oswald's Church, his father James was a cabinet maker,⁴ his mother was Isabella Hull⁵. The search to find siblings, or where the Lister's lived in New Elvet, was unproductive but William's will⁶ indicates he had at least one younger sister, Elizabeth.

The next record of William's life is found in an indenture of apprenticeship dated 13th October 1798:⁷ *'... be placed, William Lister aged 13 years and 6 months or thereabouts, a poor Child of said Parish of Saint Oswald, Apprentice to William Grieveson of the Parish of Saint Nicholas in the said City of Durham, Whitesmith, with him to dwell and serve ... until the said Apprentice shall accomplish his full Age of twenty one years'*. The indenture states William should serve his master *'according to his power, wit and ability'* and *'behave himself towards his master and family'*. The master should train his apprentice *'in the art and mastery of a whitesmith'* and *'will teach and instruct ... in the best way and manner that he can'*.

Evidence suggests William Grieveson may have been William's uncle, his wife was Margaret Lister,⁸ a possible older sister to William's father James. Knowing the course of William's life, his master must have trained him well *'in the art and mastery of a whitesmith'* and William's *'power, wit and ability'* was probably above that of the average young man. The 13th of October 1798 was the day that was to define William's life.

3. Family and employment

By law an apprentice was placed with a master for at least seven years,⁹ so it will be assumed William completed his apprenticeship around 1805/06 at the age of 20/21. Records next locate William 20 miles south in Darlington, where he married Margaret Dodds in St Cuthbert's Church on 26th January 1807,¹⁰ a daughter of a weaver and a native of Darlington.¹¹ Henry Spencer writing in 1862¹² intimates William's move to Darlington was probably for employment, he having '*been engaged at the factory of Messrs Pease.*' This may have been Pease's Low Mill and as a qualified whitesmith, William may have been employed repairing and making mill machinery.

Seven months after their marriage William and Margaret had their first child, Isabella, born on 20th August 1807.¹³ William and Margaret's family grew, having a further four children between 1808 and 1814, two girls and two boys. In November 1816 Margaret died at the age of 40, her death record indicates the family were living in Northgate Darlington at the time.¹⁴ Five years later William married Sarah Atkinson on 16th September 1821;¹⁵ between 1822 and 1834 they have six children, five daughters and a son.¹⁶ Sarah died in 1838 aged 46 from typhus fever, her death certificate suggests the family were living in Hope Town.¹⁷ In April 1848, two years before his death, William married Elizabeth Atkinson,¹⁸ widow of the proprietor of the Three Tuns Inn, Darlington, 30 years his junior. They had one daughter Fanny, who was just five months old when William died.¹⁹ All twelve children survived to adulthood.

Spencer²⁰ indicates that as William's family grew, so his work moved on from Pease's Mill: '*in Tubwell Row Tanyard Mr William Lister ... commenced business on his own account and was certainly not disappointed by the result of his enterprise. He was careful, pushing and industrious, and his toil and frugality enabled him to accumulate considerable property.*'

4. Building a business and accumulating property: 1824 – 1832

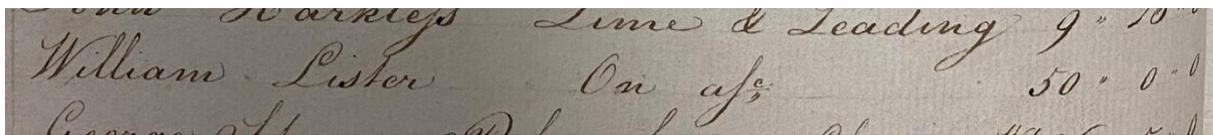
Setting up business in Tubwell row 1824

Sources linked to events in William's life suggest he probably started his own business in Tubwell Row around 1824,²¹ at the age of 39, 18 years after starting his first job in Pease's Mill, three years after his second marriage and around the time of the birth of his seventh child.

The first available trade directory in which William is mentioned is 1827,²² he is listed under whitesmiths and bell hangers in Tubwell Row, but it is in the S&DRC sub-committee minute books that the history of William's business life is principally told.

First orders for the Stockton and Darlington Railway Company: 1826-1828

On 27th January 1826.²³ about two years after setting up business in Tubwell Row and four months after the opening of the S&DR, William is mentioned for the first time carrying out work for the S&DRC. He is in a list of individuals for whom '*payments are confirmed*', it is frustrating that William's entry does not state what the payment of £50 '*on account*' was for.



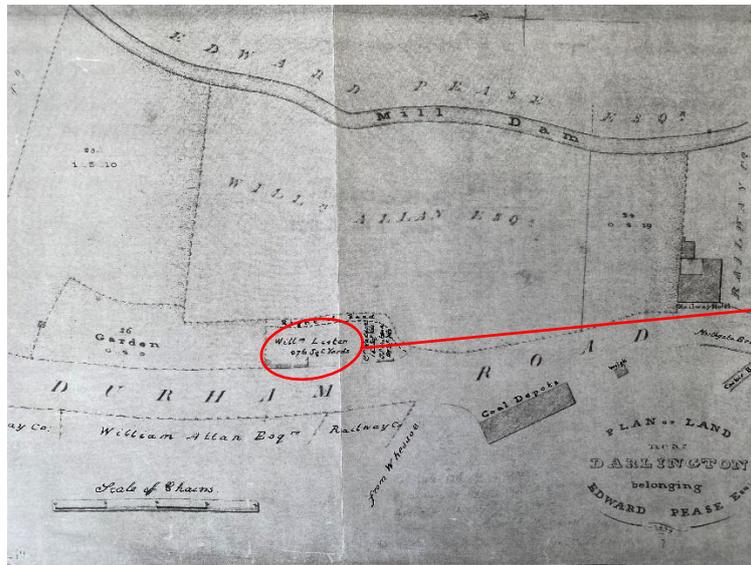
S&DRC sub-Committee meeting 27th January 1826: TNA: RAIL 667/31

From this first mention of William's connection with the S&DR, to December 1828, he is mentioned a further nine times receiving payments ranging from £20 to £120.²⁴ Only on one occasion the reason for payment is recorded, on 18th January 1828 William was paid £120 for '*smith work*', but still not very informing.

After 12th December 1828, when William was due a payment of £100,²⁵ there is a period of over a year, to March 1830, when he seemed to receive no work from the S&DRC. Was there a particular reason for this? It is known by 1834 William had moved his Tubwell Row business into Northgate,²⁶ but there are no available trade directories for the period between 1829 and 1833 to indicate when this could have happened. Could it be during 1829 William was concentrating on establishing his new works in Northgate? There is evidence to suggest so.

Purchasing land and building a foundry in Northgate: 1828-1829

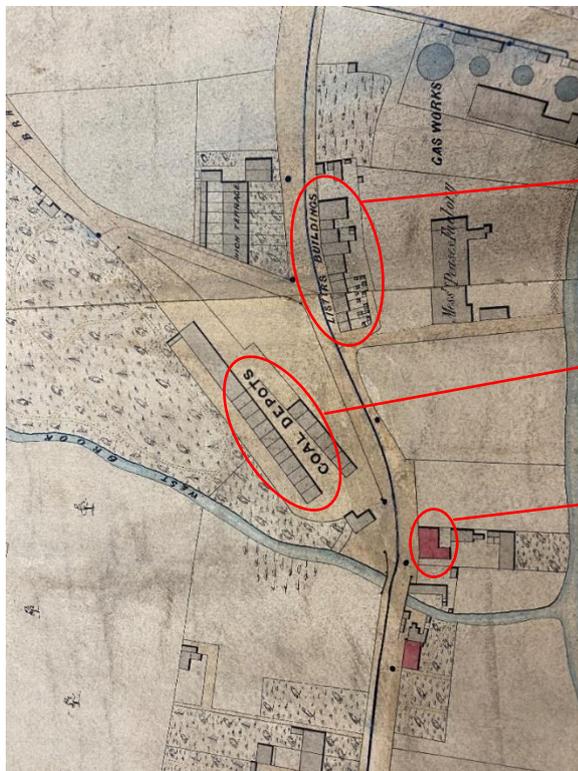
On studying a map of Darlington dated 1851, a line of buildings named '*Lister's Buildings*' was spotted in Northgate²⁷ and C P Nicholson places Lister's Buildings together with a foundry.²⁸ So when did William buy some land and build himself a line of dwelling houses and foundry in Northgate? A clue is found in a plan produced for Edward Pease dated 1829.²⁹ On this is a plot measuring 876 sq yards assigned to '*William Lister*' which corresponds to the 1851 location of Lister's Buildings.



William's plot of land 1829

William's plot of land on Edward Pease's 1829 Plan. Darlington Libraries, Centre for Local Studies U418a.40. 33877. Reproduced by permission of Darlington Libraries, Centre for Local Studies.

Faint writing on the map indicated William paid Edward Pease a fee for the land, three shillings per square yard, from 1st July 1828. Why in 1828 did William decide to move his works from Tubwell Row, in the bustling commercial centre of Darlington, to Northgate, in the rural north? Lister's Buildings were found located close to the S&DR Darlington branch line and coal depot, and just north of the S&DRC's Railway Tavern, built in 1827.



Lister's Buildings 1851

Stockton and Darlington Railway's Coal Depots

Railway Tavern

Location of Lister's Buildings: Town of Darlington in the county of Durham 1851 map. Darlington Libraries, Centre for Local Studies U418.a.40.L.C. 36902 Reproduced by permission of Darlington Libraries, Centre for Local Studies.

The work William received from the S&DRC between 1826 and 1828 must have given him interest in the new railway and prompted his decision to move his works closer to the hub of railway activity. William's move out of Darlington, around 1829, precedes the 1832³⁰ expansion of William and Alfred Kitching's business from Tubwell Row, to their Railway Foundry between the S&DR Darlington branch line and the coal depot.

William's S&DR work and move out to Northgate speaks of his dedication to, and ambition for, his business. In 1827³¹ there were a number of whitesmiths working in Tubwell Row alongside William, but it is only he and the Kitching brothers who took on S&DR work. The Kitching's were Quakers and had strong links with the S&DRC, William Kitching was an early shareholder and was on the S&DRC management committee from 1825 to 1841.³² William was not only competing with the Kitching's S&DRC insider knowledge, but was also surviving alongside their additional generation's worth of business experience and the family's strong financial foundations, William and Alfred Kitching's father had started their Tubwell Row business in 1790.

Stockton and Darlington Railway orders for Middlesbrough: 1830

The first piece of S&DR work for William's new Northgate foundry may possibly have been for 'two tons [of keys] ... divided between Edward Elwood and Wm Lister',³³ mentioned at the sub-committee meeting on 12th March 1830. William had competed for this order with Elwood and the Bedlington Co; the keys were to be used for fastening the 'M I Rails'.³⁴ The Middlesbrough line rails? The Middlesbrough Branch of the S&DR was opened on 27th December 1830. It supplied the new coal staithes at Port Darlington, Middlesbrough, built to meet increasing demand for coal export. The key order was not the only work William had for the S&DRC Middlesbrough project, the sub-committee minutes of 9th April 1830 indicated that William entered into an agreement 'for the Iron Work wanted at Middlesbrough'.³⁵ Attempts failed in finding what the iron works wanted at Middlesbrough were.

Ordered that James Dixon do prepare the Draft of an Agreement with Wm Lister for the Iron Works wanted at Middlesbrough agreeably to the Terms of his offer and produce the same for the Committee's approval next Friday -

S&DRC Company's 9th April 1830 Sub-Committee meeting entry: TNA: RAIL 667/31

William's last piece of work in 1830 was received on 4th December, where he, together with William Kitching and John Botcherby, were contracted to provide 20 chaldron coal waggons each, at £20 per waggon.³⁶

Purchasing land in Middlesbrough: 1831

William's Middlesbrough work must have sparked his interest in the development of the new town. Some Title Deeds³⁷ held by Teesside Archives and William Lillie's *'The History of Middlesbrough'*³⁸, record an indenture drawn up on 8th February 1831 between the Owners of the Middlesbrough Estate and a list of people who purchased the first plots of Middlesbrough land. William was listed among them, others being Henry Pease, Richard Otley and names of millers, joiners, shopkeepers, inn keepers, bricklayers.

The Owners of the Middlesbrough Estate was established in 1829 by a group of business men and bankers, including Joseph and Edward Pease; they purchased a farm and agricultural land in 1830,³⁹ on which the S&DRC's surveyor and land valuer, Richard Otley, laid out the new railway town of Middlesbrough.⁴⁰

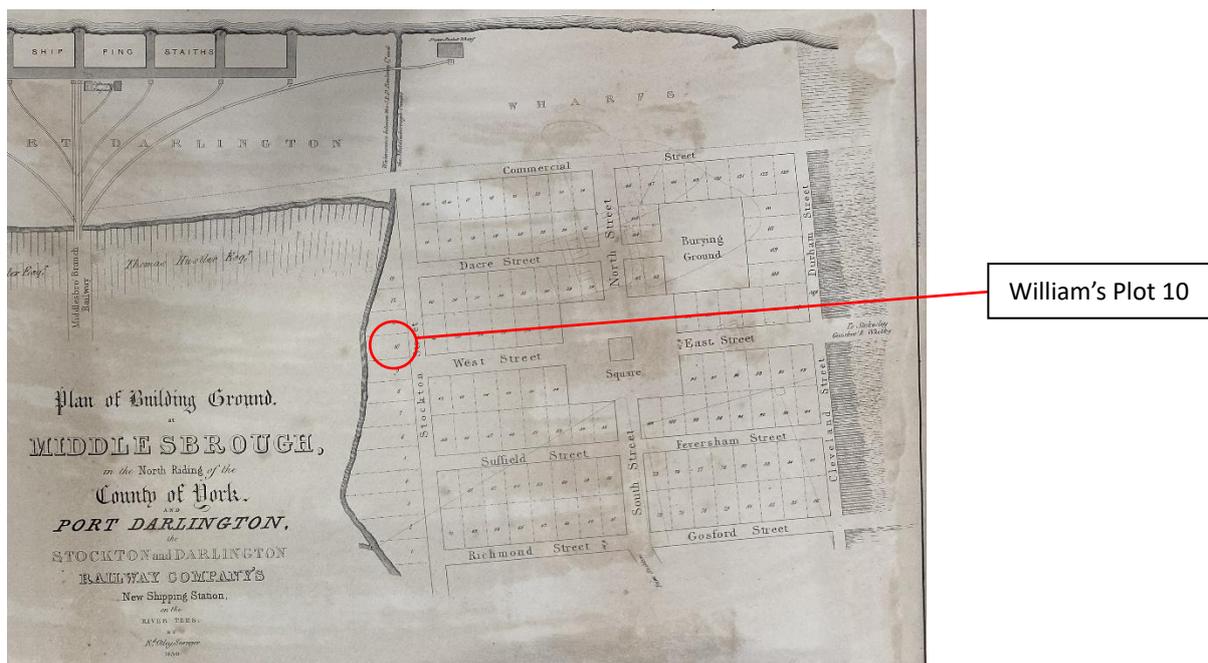
The Durham Chronical of 20th February 1830⁴¹ printed a sale advert for the first plots of Middlesbrough development land and helps explain the reason for the new town:

'Middlesbrough is situated near the entrance and on the banks of the River Tees, which is navigable to the margin of the Estate for ships of 300 tons and which is much frequented by British and Foreign vessels. From the rapidly increasing trade in the exportation of coals from the River Tees established since the opening of the Stockton and Darlington Railway, and from the great facilities which will be given for the increase of that important branch of trade and of commerce in general by means of the Middlesbrough Branch Railway, there is little doubt that Middlesbrough will soon rise into a town of great commercial consequence'.

Investors, manufacturers and builders were being introduced to the desirable economic situation of the developing Port Darlington. The advert continues with gallant effort to entice new inhabitants, services and businesses to the town.

'The lots offered for sale have been arranged with the utmost attention to public convenience and advantage.... Middlesbrough forms part of the rich district of Cleveland; the situation is extremely healthy and airy, and commands beautiful views of the river and the surrounding country. It is situated about four miles from the flourishing town of Stockton, with which there will be, by the Middlesbrough Branch Railway, a ready communication'.

William was enticed to 1830's Middlesbrough. Investigation found no evidence of any Lister's settling or working in the town, so William's purchase of plot 10 on Stockton Road⁴² was probably as an investment. At the time of purchasing his plot in February 1831, William was described as an iron founder, indicating that by the early 1830's he had established himself as a man of business within the iron line, as well as a prospector at the dawn of the modern railway age.

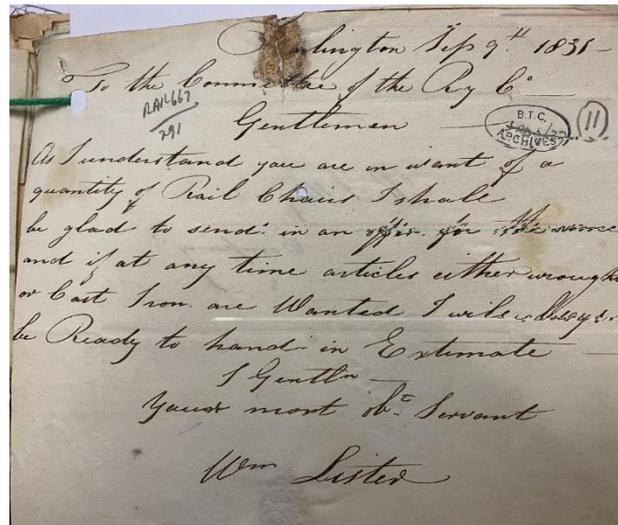


New town of Middlesbrough: 1830 Richard Otley Plan of Building Ground, Middlesbrough. Teesside Archives U.OME (2)/6/1

Improving as an iron founder: 1831-1832

During 1831 William is mentioned twice for S&DR work. The way William receives these orders gives the impression he is being given the opportunity to prove himself and his Northgate foundry.

On 6th May Joseph Pease reported he had ‘ordered William Lister to make 5 tons of Chairs as a sample at £7-15-0 per ton’.⁴³ And on 23rd September, William is associated with a Kitching order for 200 coupling chains ‘to be made of the best bar iron’: ‘Also an order be given to William Lister for 100 coupling chains, provided he can satisfy our Engineer as to the quality of the iron’. Two weeks prior to William being given this order, he had written to the sub-committee: ‘As I understand you are in want of a quantity of Rail Chains I shall be glad to send in an offer for the same’.⁴⁴



9th September 1831 Letter from William Lister to the Committee of the Railway Company: TNA: RAIL 667/291⁴⁵

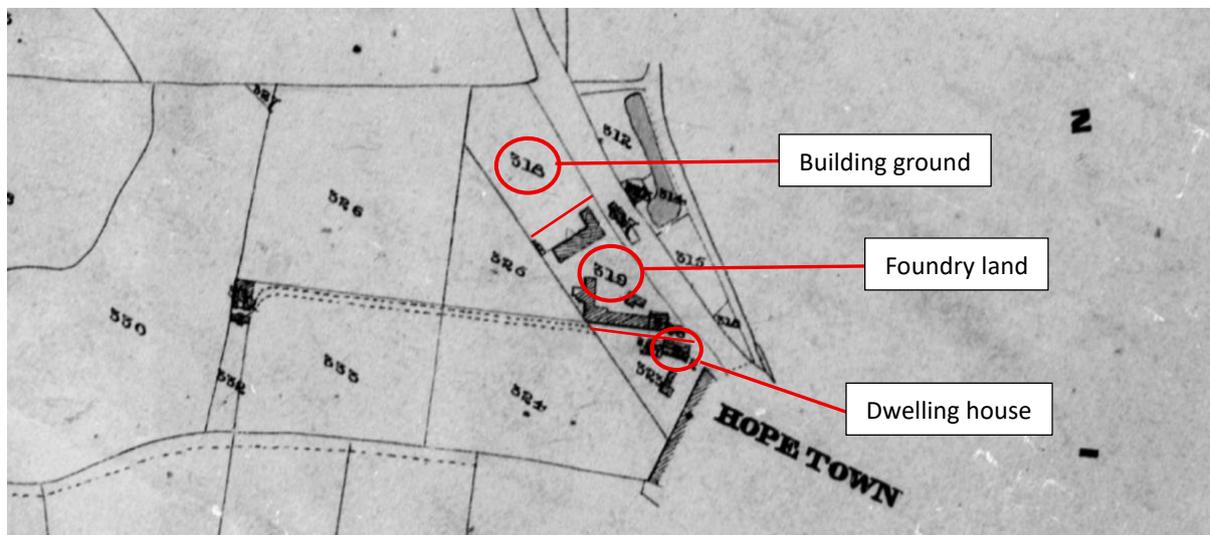
Spencer⁴⁶ described William as ‘careful’ and ‘pushing’; William was obviously a proactive businessman, keeping his ear to the ground for work, making his presence known and seeking out opportunities to advance himself.

Joseph Pease and the committee must have been satisfied with William’s work, as on 31st January 1832 he was invited to tender for 140 tons of chairs: ‘... that the following persons be requested to tender to this Company ...: William Kitching, William Lister, Losh Wilson and Co’.⁴⁷ If William had submitted a tender, the outcome was perhaps disappointing, on the 20th the committee decided to split the work between Kitching and Losh Wilson. The chair orders placed during 1831 and early 1832, for the most part, probably went towards the doubling of the main line from Brusselton Bank Foot to Stockton, where a reported 285 tons of cast iron chairs were required.⁴⁸

There was a better outcome for William eight months later. On 15th June 1832, Thomas Storey was authorised to ‘contract for a quantity of 3 inch cast Iron pipes for carrying the water from the Pump to the Engine Tank at Middlesbro’. On 21st September, assuming the events are associated, it is reported ‘William Lister’s offer to supply metal pipes wanted for the sum of 8s/9d per cwt is accepted⁴⁹. Eighteen thirty-two ended with another successful bid for work, on 5th October William was ‘let’ the work to repair waggons damaged by a rope break at Brusselton for £22.15.0.⁵⁰

The grandest of ventures: Hope Town Foundry 1832

Four years after obtaining land in Northgate for his foundry, William’s most grandest of business ventures is recorded in a collection of indentures held at The Story.⁵¹ On 25th October 1832, with the aid of a mortgage from Richard Otley and Isaac Coats, William purchased three pieces of land from Edward Pease.⁵² The indenture describes the location of each piece of land and further investigation identified the use of each piece on the 1847 tithe map of Cockerton.⁵³ William is recorded as landowner of plots 318 - building land; 319 - foundry and 320 - dwelling house. The land is located on the outskirts of Hope Town, Darlington and the layout of William’s foundry buildings are clearly seen on the tithe map.



Location of William Lister’s 1832/33 Hope Town Foundry on 1847 Tithe Map. © National Library of Scotland. © TheGeneologist © Crown Copyright Images reproduced courtesy of The National Archives London England

So around the same time the Kitching’s started to expand their business from Tubwell Row into their 1832 Railway Foundry, William purchased land in Hope Town, next to the S&DR

main line, for the expansion and development of his own foundry business from Northgate.ⁱⁱ The work needed by the S&DRC during its early years clearly played a vital role in enabling the industrious, ambitious and frugal William to grow his 1824 business.

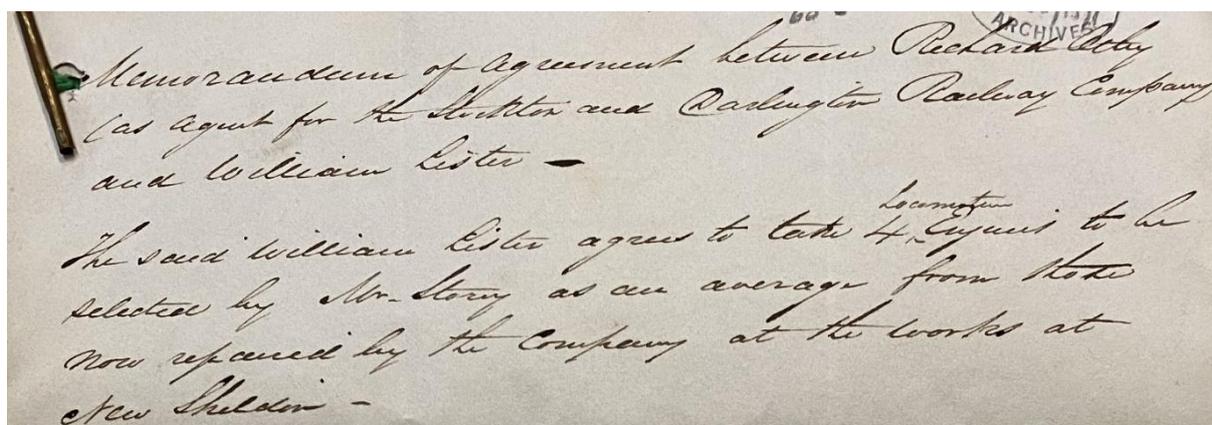
5. The golden years 1: Locomotive contracts 1833-1839

By the end of 1832, the S&DRC were running 22 locomotives, 13 having been built between 1831 and 1832.⁵⁴ The efficiency of locomotive movement had been increased by the doubling of the mainline between Brusselton Bank Foot and Stockton by 1832, and August 1833 heralded the end of coal waggon haulage by horse. In October 1833 the Company bought out the leading coach operators. By early 1834, the S&DR mainline operated only locomotive power, for both the haulage of coals and the transport of passengers.⁵⁵

William was to take advantage of these developments. With his Hope Town Foundry potentially coming into operation late 1833/early 1834, he was able to acquire S&DRC contracts which would progressively enable him to become a locomotive engine builder.

Repair agreement: 1833

Probably still working from his Northgate foundry, the 2nd of March 1833 may well have been one of William's most memorable days as a businessman. On that day, a memorandum of agreement was drawn up between William and Richard Otley, agent for the S&DRC.⁵⁶

A photograph of a handwritten document on aged paper. The text is written in cursive ink. At the top, it reads 'Memorandum of Agreement between Richard Otley (as agent for the Stockton and Darlington Railway Company) and William Lister -'. Below this, it says 'The said William Lister agrees to take 4 ^{Locomotives} engines to be selected by Mr. Story as an average from those now repaired by the Company at the works at New Sheldon -'. There is a stamp in the top right corner that says 'ARCHIVED'. A pen is visible on the left side of the document.

William's agreement to keep four locomotive engines in repair for six months 2nd March 1833: TNA: RAIL 667/656

ⁱⁱ It is interesting to note John Walker wrote in his 1836 'application' letter: 'it [the Railway Tavern] is nearly connected with my Employment and could attend to it without much inconvenience', was John saying it would be easy to manage the Railway Tavern with it being quite close to his work, as a whitesmith; at Mr Lister's foundry? Could it be, that William had assisted a trusted employee to venture into a change of occupation?

The agreement was for six months, starting on 11th March 1833, and William was: '*... to take 4 Locomotive Engines to be selected by Mr Storey*' with William agreeing '*... to take the Engines ... for the company's use, to keep in substantial good repair, finding all Materials and Labour*' at the end of the agreement the engines were '*... to be returned to the Company*'. William was to be paid '*1/8 of a penny per ton per mile for every ton of coals or other articles carried on the railway*'.

A locomotive engine valuation document indicates the four engines assigned to William were selected by drawing lots on 9th March 1833.⁵⁷ The engines '*had been put in thorough good repair by the Company*' at New Shildon and Thomas Storey had surveyed and valued them. The engines allotted to William were: Black Diamond, valued at £500; Rocket, valued at £530; Majestic, valued at £950 and Director, valued at £1000.

William Kitching was also taking on repair of locomotive engines at this time, his agreement started around six months before William's. A sub-committee meeting entry on 10th August 1832 states: '*It is agreed that William Kitching take the following engines into his especial charge for repair*'.⁵⁸ A list of engines could not be found, but an account book for the Kitching foundry⁵⁹ was found showing that the Kitching's had actually been repairing engines a year before. The book summarising costs and repairs done from September 1831 shows that Royal George, Experiment, Rocket and Victory had passed through Kitching's works. The same account book contains the costs of repairs on locomotives up to June 1832, out of the 15 locomotives in operation on the S&DR at the end of 1831, 13 had been through the Kitching's foundry for repair by mid-1832.

1833 was also when Timothy Hackworth left his role as the S&DR's superintendent for permanent and locomotive engines and took responsibility for the S&DRC's locomotive power and workshops⁶⁰. Hackworth was to ensure the locomotive engines were maintained in good condition and was responsible for finding men and materials. The S&DRC would take back all locomotives on conclusion of the contract and receive 5% interest annually on the initial valuation of the engines. Hackworth was paid $\frac{4}{10}$ of a penny per ton of coal per mile.

Returning to William's agreement, the S&DRC sub-committee is reminded on 13th September 1833: '*William Lister's contract for repairing Locomotive Engines Expires*' and '*Thomas Storey*

and Timothy Hackworth are directed to view the Engines and make their report of the state of repair in which they find them'.⁶¹ A letter dated 3rd October 1833⁶² indicates that after some completion work on the Majestic and Rocket engines by William and the company paying William for new water barrels, tenders and cinder traps for the Majestic, Director and Black Diamond; it was considered the agreement would be fulfilled. A positive outcome for William's first time working on locomotives.

Repairs and work done by William's Engines: 1833

Young,⁶³ presents a table of data taken from de Pambour'sⁱⁱⁱ *Practical Treatise on Locomotive Engines*, which sets out the work done by the S&DRC's locomotive fleet between 1st July and 1st December 1833. Table 1 highlights some of the data on the locomotives William had responsibility for during this time. It is interesting to note the distance travelled per day by the locomotives, the number of days the engines were in repair, the cost of repairs and the percentage of time that the locomotives were active.

Table 1: Statement of work done by Locomotives contracted to William Lister 1st July to 1st December 1833, extract from table in Young⁵⁹ from de Pambour's *Practical Treatise on Locomotive Engines*

Locomotives under William's care	Total number of miles travelled	(Average distance travelled per day when active, miles)*	Tons of coals carried one mile	Number of days engine was in activity	Number of days engine was in repair	(Percent of time in activity)*	Amount of repairs made to engine (£sd)
Black Diamond	1000	37	26 920	27	105	20%	£14.0.5
Rocket	3940	62	109 512	64	68	48%	£57.0.9
Majestic	2880	61	90 422	47	85	36%	£131.2.3
Director	5860	64	202 492	91	41	69%	£107.19.11

* not part of de Pambour's data

New skills required during early 1830s

The 1833 repair contract had given William and his Northgate foundry employees the opportunity to gain new skills. Previous to the 1833 contract the majority of William's work for the S&DRC had been repairing and building chaldron waggons; providing keys and chairs for the rails; providing coupling chains for waggons; and pipe and other iron work for

ⁱⁱⁱ A French engineer who made a study of locomotives of the Liverpool and Manchester and Stockton and Darlington railways.

Middlesbrough. There had been a Mechanics Institute in Darlington, founded in 1825, to help the education of the working class, however it closed in 1827 and was not revived until 1840. In 1833 Timothy Hackworth founded the Railway Institute at New Shildon to educate and develop workers' skills required for the railway. Could it be that William's workforce attended Hackworth's Railway Institute? Or was the knowledge gained at the Kitching's foundry during their repair work of 1831 and 1832 shared? Was it just that William and his men applied their skills to new requirements and learnt on the job? It is not possible to say, but the rapid upskilling of foundry owners and employees for locomotive engineering was certainly taking place during 1831-1833.

William's desire for locomotive engine work: 1833

Minutes of the sub-committee meeting on 4th October⁶⁴ and 18th October 1833⁶⁵ indicate that William had been in contact with the Committee expressing a desire to keep the engines he had been repairing for a further year. A letter from William dated the 18th October 1833, indicates the nature of his application.⁶⁶ He writes *'I propose to take the four locomotion engines which have been repaired by me during the last 6 months to keep the same in repair for a further period of 12 months'*. He writes on, proposing a number of conditions under which he will take the engines and that he shall provide the labour and materials with the S&DRC paying the sum of $\frac{1}{8}$ of a penny per ton per mile.

There is an interesting note written in pencil at the end of William's letter:

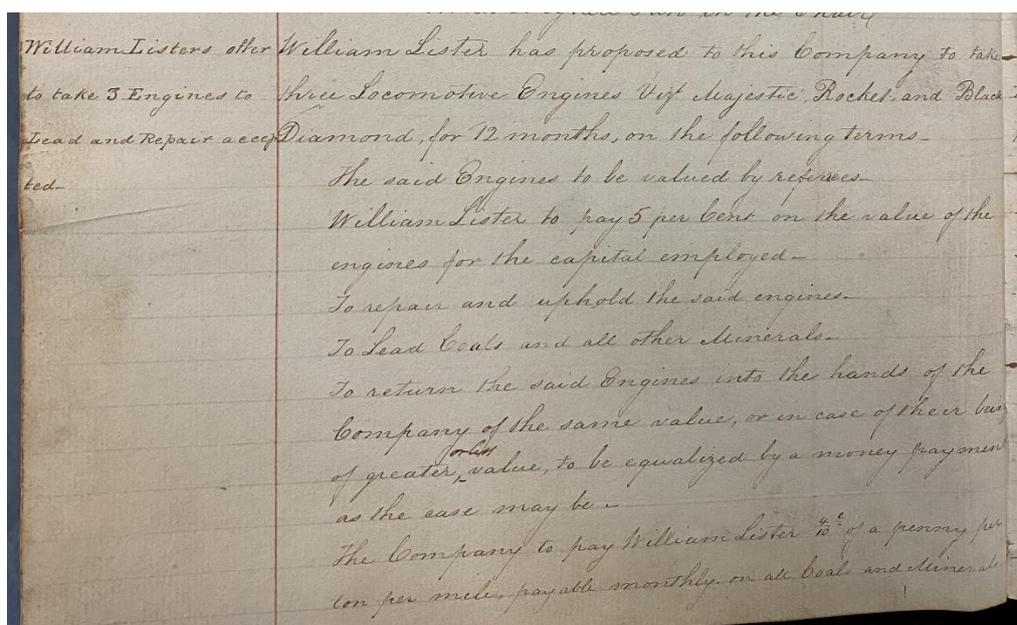
'William Lister complaining that he has entered upon an establishment very much with the view to the repairing of locomotive engines and that it a serious thing to him to have it laid useless upon his hands and that he is so situated that if the company would allow him further he has no doubt he can manage them.' EP

The signed initials 'EP' are taken to belong to Edward Pease, it seems William had been in conversation with Edward. It is clear from William's letter and Edward Pease's note, that William certainly wanted the future of his new Hope Town Foundry to be associated with locomotives and by the beginning of 1834 the foundry may have been ready to take on such work.

Repair and leading contract: 1834 – 1835

William's new 'establishment' was not to be 'laid useless upon his hands', at the sub-committee meeting on 14th March 1834, it was agreed William would not only repair but also lead three locomotive engines. He now had responsibility for providing all materials and labour for the maintenance of the locomotives with the added responsibility for employing engine drivers.

William was given the Majestic, Rocket and Black Diamond, for twelve months on the following terms: 'William Lister to pay 5% on the value of the engines for the capital employed. To repair and uphold the said engines. To lead coals and all other minerals. To return the said engines into the hands of the company. The company to pay William Lister $\frac{4}{10}$ of a penny per ton per mile payable monthly on all coals and minerals led by the said engines.⁶⁷ The same terms at Hackworth's 1833 agreement.



William's repair and leading contract agreement 14th March 1834: RAIL 667/33 National Archives

The Kitching brothers were also to have a similar agreement and Hackworth's contract was renewed. The details of Hackworth's agreement has not been researched, but the sub-committee meeting notes shed some light into the background of the Kitching's agreement. It is interesting to compare the way the Kitching's accepted their agreement against William's proactive entreating, the Kitching's seem to have procrastinated. At the same sub-committee meeting at which William's offer was accepted on 14th March 1834, it was recorded that:

'William Kitching proposes to take the remainder of the Locomotive Engines for conveying coals not offered to Timothy Hackworth on the same terms, left for the consideration of our next meeting'. At the next meeting on 21st March: '... William Kitching states he requests another week to consider whether he will accept the engines offered to him by the committee on the same terms as those let to Hackworth and Lister'. Finally, at the meeting on 29th of March: 'W and A Kitching accept the Co's offer of leading coals by three of the locomotive engines and keeping the same in repair for 12 months, $\frac{4}{10}$ of a penny per ton per mile and should the railway company require more engines W and A Kitching to be allowed to at a contract price'. Perhaps there had been some disagreement around the number of engines the Kitching's would have liked to have taken. The official signing off of all three contracts finally took place on the 25th of July 1834.⁶⁸

Dodds' valuation: 1834

Prior to all three agreements being made, the sub-committee had agreed on 14 March 1834 to appoint George Dodds, engineer to the Monkland and Kirkintilloch Railway,⁶⁹ to value the locomotive engines to be contracted out.⁷⁰ Richard Otley was to write to Dodds and request him to *'appoint an early day for coming over'*. By 29th March Dodds had replied, he would be *'in the neighbourhood and ready to enter on the valuation ... on Friday 4th of next month'*.

A document of Dodds' valuation of the locomotive engines, made between the 4th and 12th of April 1834, is found in the Preston Park Museum archive.⁷¹ Dodds valued a total of 23 locomotives, he recorded he did not receive information on which engines were to be *'given to each contractor, or which were to be kept by the Company for passengers'*, but there are pencilled initials next to locomotives, which could indicate which contractor was responsible for them. It is not known if the initials are contemporary to the document or were added later, but the locomotives with 'L' beside them correspond to the locomotives listed in William's 1834 contract: the Black Diamond, Rocket and Majestic. According to the document the Kitching brothers were assigned Hope, Experiment and William 4th. Locomotives assigned to the S&DRC were Globe, Planet, North Star, Shildon and Wilberforce. Hackworth had the remaining twelve.

Table 2 shows Dodds' description and valuation of the locomotives assigned to William, each locomotive's driver at the time of valuation was also recorded. Dodds' value for each

locomotive is down on Storey's 1833 valuation. The probable reason for this is Storey's valuation was given on the engines having been '*put in thorough good repair*'⁷² and Dodds' valuation makes comments on aspects of the locomotives which are not in such good condition.

Table 2: Extracts from Dodds' 1834 Valuation, Preston Park Museum archive⁶⁸

Locomotive	Driver	Description	Value
Black Diamond	William Gill	9 inch Cylinders, two feet stroke, single tube, middling good, 4 wheels worn, ordinary load – 16 waggons	May be worth £270.0.0 with tender
Rocket	J Howdon	10 ¹ / ₄ inch cylinders, 20 inch stroke, iron tube been in 6 months, 6 wheels much worn, ordinary load – 20 waggons	May be worth £300.0.0 with tender
Majestic	William Baisten	14 ¹ / ₂ inch cylinders, 16 inch stroke, 104 copper tubes length of boiler 13 feet and 3 ¹ / ₂ feet diameter, 6 wheels in good condition, ? pipes and tubes not in good repair, ordinary load – 24 waggons	May be worth £590.0.0 with tender

Company overseeing contract agreements

Although the S&DRC subcontracted the repair and leading of locomotives to William, the size of the company enabled the management committee to keep a close eye on the standards to which he and the other contractors were discharging their agreements.

William had to ensure the locomotives under his care were kept in good condition; the locomotive fleet was regularly inspected and it was known for the committee to call out the contractors for '*slovenly*'⁷³ looking locomotives.

William and the other contractors also had responsibility to make improvements to the locomotives under their care. For example, spark arresting netting had been fitted over locomotive chimney caps to stop sparks causing fires on adjacent land, but in June 1834, a fire was reported and the land owner was demanding damages; the committee asked William and the other contractors to provide an improved cap for their engine chimneys.⁷⁴

In October 1835, the contractors were ordered to fix large numbers on the chimney of each of their locomotives to aid identification in cases where the engines were operated against company rules; fines were ordered on engine drivers as punishment for incidents such as breaking the spend limit, leaving locomotives unattended or allowing passengers on engines

or waggons. Although William had responsibility for the employment of engine drivers, the company still had influence over their engagement and discharge. On 31st October 1834 William was instructed to suspend Joseph Howden, the engine man of Rocket, *'for negligence, he having been repeatedly fined.'*⁷⁵

Dodds' death and revaluation of locomotives: 1835

A sad event was reported at the sub-committee meeting on 13th February 1835⁷⁶ *'... heard with great regret of the accident which has terminated suddenly the existence of George Dodds.'*^{iv} George's death prompted the committee to inform the contractors their agreements would expire on 1st September 1835, but stated *'that it is not their intention to make any variation in the leading prices'* and that the contracts should continue *'till the 1st of February 1836. The object of this arrangement is to obtain for the satisfaction of this company and contractors a new valuation...'*⁷⁷ On 7th August 1835, an abstract of the new valuation of the locomotive engines was presented to the sub-committee meeting.⁷⁸ John Dixon had carried out the valuation and valued all of William's engines at £970, a depreciation of £190 on Dodds' valuation of April 1834.

Nearing the time of contract 1834-36 termination, John Graham reported on 30th October 1835 that *'Lister has performed his contract satisfactorily.'*⁷⁹

William extending his contracting portfolio 1835

While working through the repairing and leading 1834 – 1836 contract William, sometime during early 1835, had put in a tender for a separate contract to operate the coach and merchandise locomotives on the Middlesbrough branch.

The minutes of the sub-committee meeting on 3rd April 1835⁸⁰ record the outcome of his bid for the work: *'Engine power on Mbro' Branch let: The tenders for supplying engine power for the Coach and Merchandise trains having been considered, it is agreed to let the same to William Lister at 7d per mile'.*

^{iv} Dodds had died as a result of slipping on the self-acting incline plane at the Ballochney colliery just as loaded waggons were coming down. The waggons had passed over his legs, nearly severing them. He was carried to his house, surgeons amputated, but Dodds was in a very weak state and eventually died. The Public Ledger and Daily Advert 26 January 1835, British Newspaper Archive.

Engine power on
 Mtn Branch let to
 William Lister

one tender for supplying
 Engine power for the Coach and Merchandise
 Trains having been considered, It is agreed
 to let the same to William Lister at 7/-
 per mile - according to Specification and
 Agreement - Our Engineer is requested to
 have both signed

William's Middlesbrough coach and merchandise contract agreement 3rd April 1835: TNA: RAIL 667/33

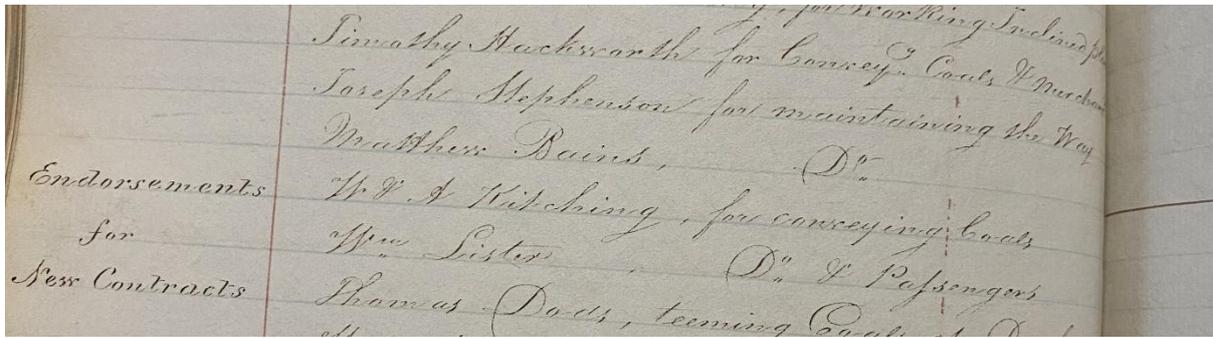
Other orders from the S&DRC 1834-1835

While William was managing his contract work, he was also receiving other orders from the S&DRC⁸¹: in April 1834 William was awarded work, together with Hackworth and Downing, to provide half the order of a new pattern of chairs. November 1834 he received work to repair merchandise waggons. January 1835 William had tendered the lowest out of four to make six merchandise waggons and in March 1835, his offer was accepted to provide 72 tons of cast iron chairs.

It is interesting to think about what time William completely left his Northgate foundry and carried out all his work from Hope Town. Was he for a time working out of both? Building up the Hope Town Foundry for locomotive work while using Northgate for the smaller chair and waggon work? This may be, as Pigot's 1834 trade directory has William at Northgate, although it is known for the directories to be out of date from time to time.

New Leading Contract: 1836–1837

As the 1834-36 contracts reached their end, agreement on the approval of new contracts was announced at the sub-committee meeting on 29th January 1836, the Secretary being requested to complete them '*with as little delay as possible*'.⁸² The minutes list a range of contractors who took on responsibility for such things as clocks, weighing coals, the depots, and the shipping staites. William was listed for conveying coals and passengers, the Kitchings were to convey coals and Hackworth coals and merchandise. No detailed documents of William's 1836 contract were found, but Kirby⁸³ has William receiving $\frac{4}{12}$ of a penny per ton per mile on coals and 7d per mile for coaches, until 31st January 1837.



William's 1836 contract agreement 29th January 1836: TNA: RAIL 667/33

The Newcastle Daily Chronicle on 28th September 1875⁸⁴ covered the 50th anniversary of the opening of the S&DR, under 'recollections of the first engine drivers', Jim Gowland talks about working for William: '*... In 1836 William Lister took the trains between Stockton and Middlesbrough... He paid me then 7s per day and I only ran 3 trips between two places. I believe that he had 7¹/₂d per mile from the company... In 1839 I ran 10 trips per day for Lister or 136 miles per day and he used to say to me "Bill, I tell thee, the Swift put more money into my pocket when thou was running her 136 miles per day than any job I ever had in my life"*'.

Closure of William's 1835 Middlesbrough contract: 1839

Gowland's words suggest that William was still operating the contract for leading coaches on the Middlesbrough line up until 1839; evidence does suggest this. The sub-committee minutes for the end of 1839 record the circumstances under which William's coach leading contract came to an end.⁸⁵ On 25th October 1839 '*The coach committee report that William Lister thinks it advisable for the company to take the working of the coaches into their own hands*'.

From 1837 the company had started to change the way in which the railway was managed,⁸⁶ and by 1840 all of its operations had been taken into direct management.⁸⁷

6. Golden Years 2: Becoming an engine builder: 1838 -1840

During 1838 William continued to work on S&DRC locomotives, and in the process did some substantial work.⁸⁸ John Graham reported on 3rd August 1838 that the Black Diamond engine

had been *'placed on the way and is likely to answer well'* after it had been remodelled by William.

On the 7th September 1838 William is associated with a grander project, he is given the job of building locomotive engines: *'New Coal engines: agreed to accept two engines of William Lister for the sum of £530 each ... William Lister taking the William 4th and Majestic ... with liberty to use the cylinders, motions, connecting rods and pumps in the construction of the new engines.'* However, best laid plans; on 19th April 1839 it was recorded that *'the secretary and inspector are authorised to cancel the agreement with William Lister.'* Apparently, a William Hutchinson of Poppleton had placed a £500 offer to the company for the William 4th and Majestic engines. William agreed to cancel the contract provided he was given an order for two new engines, for the sum of £1910. On 24th April 1839 the committee agreed to the settlement.

The Middlesbro locomotive: 1839

On 28th August 1839, John Graham reported on a momentous event associated with William, *'new coal engines had been placed upon the way and appear likely to answer well'*; they were the Middlesbro built by William Lister and the Auckland built by Hackworth.⁸⁹ No connected record was found to indicate when William had been given the order for the Middlesbro, it may have been prior to the aborted order of September 1838, which would help explain the long lapse of seven months, to April 1839 when that order was cancelled; William had been working on the Middlesbro and had not started work on the September 1838 order. Also, during 1838, William was still working on other S&DR work; repairing waggons broken at Brusselton and at Black Boy and Deanery collieries, and building timber waggons.⁹⁰

William had finally made it as an engine builder; what a proud moment for a man apprenticed as a poor child 41 years earlier. The Middlesbro was built by William from plans of the 1838 Tory engine, designed by Timothy Hackworth and built by Hackworth and Downing, being the first of a new and efficient type of engine.⁹¹

The Durham County Advertiser of 23rd April 1841 mentions William in association with the Middlesbro. *'Extraordinary Locomotive Performance'*: on the S&DR during 27 days in March, the Pilot locomotive, built by W & A Kitching, travelled 3712 miles or 137 ¹/₂ miles per day and hauled a total weight of 13 856 tons, composed of 6964 tons of coals and 6892 tons of

waggons; the Middlesbro locomotive, built by William Lister, travelled in the same time 3665 miles, or $135\frac{3}{4}$ miles per day, and hauled a total weight of 12987 tons, of which were 6542 tons of coals and 6445 tons of waggons.

The memory of the Middlesbro was also kept alive in the Newcastle Daily Chronicle of 28th September 1875, covering the 50th anniversary celebrations of the S&DR, it mentions a display of photographs of locomotive engines, one of them being the Middlesbro. *'It had a single return flue causing the fire door and the chimney to be at the same end... it had two tenders... It was worked on the S&DR up to 1857 and then sold to the South Durham and Lancashire Union Railway where it was at work up to 1863'*. A picture of the Middlesbro can be found in The Proceedings of the Institution of Mechanical Engineers May 1890 presidential address by Joseph Tomlinson.⁹²

Etherley and Ocean locomotives: 1840

William's two new engines from the re-negotiated April 1839 agreement were to be called the Etherley⁹³ and the Ocean,⁹⁴ also designed from the plan of the Tory. On the 7th February 1840 it was reported *'William Lister has placed on the way a new engine called the Etherley which upon trial appeared satisfactory'*.⁹⁵ The Ocean followed, on the 14th August 1840.⁹⁶

7. The last ten years: 1840 – 1850

Early 1840's uncertainty

As indicated earlier, by 1840 all S&DRC operations had been taken into direct management, so as the 1840's progressed, William's business faced uncertainty. Alfred Kitching paints a clear picture of the economic situation William would have been sharing. In Alfred's 1843 diary on 3rd July he writes: *'I cannot but express my sorrow that my time is not so profitably occupied as I could wish – business still continues with us extremely dull and on whichever side I look the picture presents the most gloomy and dark appearance'*.⁹⁷

In a letter to his half-brother John, in 1843⁹⁸ Alfred writes: *'...for a considerable time past our business has a good deal fallen off more particularly since the [S&DR]company have taken the repairing work into their own hands and in the second from a considerable number of foundries having been commenced in almost every direction around the neighbourhood and*

the railways which was our chief support being finished ... during the autumn, winter, and spring of the last two years we could only give employment to the few hands remaining with us for three to four days a week and I fear this is again likely to be the case as winter approaches'. Such was his despair, Alfred went on to ask John for advice as to whether he should tell his brother William his thought to resign and discontinue the business.

While looking through Alfred Kitching's 1843 diary an entry was found which shed light on how Alfred saw William as a business rival at this time.⁹⁹ On 4th May 1843 he wrote: *'...engaged with making an estimate of a Cattle carriage for the North of England Railway Company'. Four days later: 'I have completed the estimate ... which amounts to £48.15.6'. The following day: 'Lister has received the order for the carriages and at a price I could not have supposed anyone possessed of a moderate share of judgement would have tendered – I understand his offer was about £35 each...This is another amongst, not a few, instances of the unfortunate effects of having to compete with, to use his own expression, a bungling fellow, alike both ruining to himself and the trade'. Alfred goes on to say, '...I may safely say that Lister in tending for any work seldom makes an estimate of the probable cost, but gives what he calls a random guess'. A week later Alfred was still festering about the loss of contract: 'My conjecture as to Lister's offer for the cattle carriages was correct – I am told today that he made no calculation of the probable cost but guessed at the price'. That day's diary entry was signed off with an apt remark about the weather, 'The atmosphere is ungenial and cold and the wind northerly'.*

New lines of work during the 1840's

William needed to call upon his business strengths to find new lines of work as the railway work fell away. Records show that in June 1841 William won a contract to build a turning bridge over the dock between the Tide Harbour and the Slake in the Port of Hartlepool¹⁰⁰ and in 1848 he was providing iron work in the construction of St John's Church in Darlington, although this was done for 'free'; The Darlington and Stockton Times of 4th November 1848¹⁰¹ reported: *'Mr William Lister...handsomely intimated ... the iron beams which he is about to fix in the tower whereon the belfry floor is to rest may be considered as a contribution by him towards the completion of the church.'* The beam cost £12.

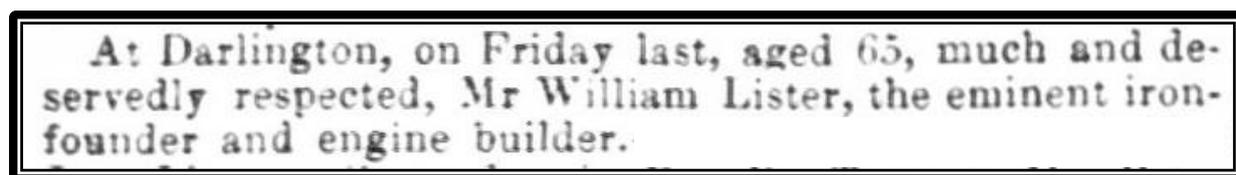
William was still getting some railway work, in 1843 he won the North of England Railway Company contract for cattle carriages; in 1844 he sold four merchandise waggons to the S&DRC; in 1845 he built ten sets of timber waggons and 20 goods waggons and supplied pig metal for a month to the S&DRC. In 1846 he was invited by the S&DRC to tender for Chairs, together with Bolckow and Vaughan, Gilkes Wilson and Co and Alfred and William Kitching.¹⁰²

William's last order from the Stockton and Darlington Railway Company: 1850

William's last order from the S&DRC was on 25th January 1850, five months before his death. William's tender for merchandise waggons was accepted over those from Alfred Kitching, the Shildon Works and Gilkes and Wilson.¹⁰³ But finally the '*lamented death of Mr Lister*' was recorded at the sub-committee meeting on 28th June 1850, brutally in association with the merchandise waggon contract. The secretary and engineer were to enquire '*... the probability of W Lister's representatives continuing the contact*', and they were keen to make sure that the work would be '*... carried out with safety and satisfaction to the company*'.

So ended William's association with the S&DR.

8. Be it remembered: William Lister, Iron Founder and Engine Builder 1785 – 1850



Notice of William's death: Durham County Advertiser, 28 June 1850.¹⁰⁴

William died at home in Lister's Buildings, with Margaret his second child present, on 21st June 1850 aged 65,¹⁰⁵ his cause of death is '*unknown, uncertified*',¹⁰⁰ but Spencer recalls William suffered '*a long time from a painful complaint*'.¹⁰⁶ William was buried in St Cuthbert's Church Yard on the 28 June 1850.¹⁰⁷

From humble beginnings to iron founder and engine builder

An advert in the Durham Chronicle on 7th March 1851 advertising the sale of William's Hope Town foundry after his death¹⁰⁸ and a plan of the foundry in an indenture dated 1 June 1877,¹⁰⁹

combine to give an idea of the scale to which William built his business. From humble beginnings as a poor child apprentice whitesmith in 1798, to an 1824 businessman in Tubwell Row, to his position at his death in 1850, as iron founder and engine builder and owner of Hope Town Foundry.

The newspaper advert describes *'all valuable and extensive stock in trade, machinery ... now on the premises at Hope Town'*; some associated with locomotive engine building, but others indicating other work passing through William's foundry, possibly during the latter years as railway work diminished. The sale of *'several loads of very superior manure now laying in a field near the first milestone on the Durham Road'* reflects a rural side of William's life; an 1838 Tithe map¹¹⁰ indicates William leased around 4 acres of grass field at Carr Close from William Adler Pease.

The following gives an indication of some of the foundry items listed for sale:

- 1 very superior new twelve horsepower high pressure steam engine with boiler;
- 2 large turning lathe with faceplate 10 feet diameter; one of the very best screwing machines; a hydraulic pipe testing machine and a lathe for turning engine and waggon wheels;
- 3 very superior planing machine, bed plate 16 foot long and capable of working 10 feet in length by three feet in breath, being one of the most valuable machines in the country;
- 4 extensive collection of patterns for ordinary use and many for articles extensively used by the largest railway companies of the present day;
- 5 about 100 ovens, boilers and stove grates of different sizes; six umbrella stands; three iron chimney tops; two dozen stench traps, some suitable for private yards and the remainder for street sewers;
- 6 office furniture including a very superior cast iron safe; excellent office table and loose desk; a copying machine;
- 7 very elegant and well finished phaeton in excellent condition.

A phaeton is a form of a sporty open carriage, having a lightly sprung body with open seating set on very large wheels and drawn by one or two horses. It was seen as a fast and dangerous

contraption¹¹¹. Could a phaeton owner be characterised as being self-assured, daring, a risk taker? Appropriate traits for making it in business.

The indenture plan shows the foundry building together with stables, offices, smith's shop, iron store, boiler, furnace and workmen's conveniences and a direct rail connection onto the S&DR main line.



Detail of William Lister's Hope Town Foundry buildings as they were in 1877. The Story, Durham, D/Whes 3/71 Reproduced by permission of The Story, Durham.

9. Concluding comments

This report used predominantly primary sources to evidence William's association with the S&DR.¹¹² Secondary sources¹¹³ were used to gain an understanding of the history and management of the S&DR and to give context to William's life. Although William's name is mentioned in the literature associated with S&DRC contracts and building of three locomotive engines, if my understanding is correct, I felt the secondary sources did not fully reflect the evidence found in the primary sources.

For example, what is written in Young¹¹⁴ and Kirby¹¹⁵ lacks accuracy around the contracting arrangements between the S&DRC and Hackworth, William and the Kitchings; Hackworth is presented as a sub-contractor rather than the S&DRC dealing with each of the contractors separately, William is overlooked completely and confusingly William and Alfred's Railway Foundry is miss-named Hope Town Foundry. Young writes: *'William and Alfred Kitching of the Hope Town Foundry Darlington extended their premises in 1832... By arrangement with Hackworth they repaired and maintained by contract some of the S&D engines'*. Kirby writes: *'Hackworth had no hesitation in subcontracting work to others... he made particular use of the brothers William and Alfred Kitching'*.

Bailey and Davidson¹¹⁶ writing on the 1834 contracting arrangement don't seem to reflect accurately the primary evidence around the sharing out of the locomotives to each contractor and again misrepresent the name of the Kitching brothers foundry: *'They [the S&DRC] decided to contract out the provision of operating services... Hackworth agreed to undertake... maintenance of about half of the locomotive fleet... The other half ... was contracted out to the Kitching brothers... who adapted their premises at the Hopetown Foundry ... and became responsible for six of the locomotive fleet... The Kitching contract was later shared with William Lister who adopted premises at the Hopetown Works, also in Darlington, looking after three locomotives'*. In the primary sources the S&DRC dealt with each of the contractors separately and William and the Kitching brothers were given three locomotives not only to maintain but lead as well.

Norman¹¹⁷ discusses the 1834 and 1836 contracting arrangements *'... assumption would be that the first contract relates to there being three parties to the one contract ... The second set of contracts..., would relate to their operation as free-standing contractors'*. And discusses the capability and capacity of engineering skills required *'Experience gained between 1834 and 1836 extended the competence and capacity of Kitching and Lister.'* Evidence gathered for this report may indicate that each contractor was dealt with separately throughout the whole contracting out period and William's 1833 agreement and the Kitching's 1831/32 repair work may indicate that growing competence and capacity started a year or two earlier.

I hope by using primary sources, detail has been added to William's role as S&DRC contractor, foundry owner and business rival of the Kitchings. I hope it will help promote his association

with the S&DRC and enable his story at the time of the birth of the modern railway to be remembered.

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- ⁴ Find my past. William Lister's baptism record
- ⁵ Find my past. James Lister's marriage record
- ⁶ The Borthwick Institute for Archives, Vol.No. 223, Ref.No. 42, July 1850
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- ¹⁴ Find my past: Durham Bishop's Transcripts Burial
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- ¹⁶ Find my past: Durham Bishop's Transcripts Baptisms
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- ⁴⁴ TNA RAIL 667/291
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- ⁵² The Story, Durham: D/Whes 3/71
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- ⁶⁸ Ibid
- ⁶⁹ The Monkland and Kirkintilloch Railway was set up by mine owners (coal and iron) and canal owners. It opened in October 1826 with its main function being for the transportation of coal but iron and passengers were also carried. The line ran from the Palacecraig coal pit to Kirkintilloch on the Fourth and Clyde Canal, where goods were carried by the canal onto Glasgow or Edinburgh.
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